

| L Number | Hits | Search Text  | DB  | Time stamp       |
|----------|------|--|---|------------------|
| -        | 3376 | gallium adj nitrid\$5  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:10 |
| -        | 9020 | gallium adj nitrid\$5 GaN "Ga N"   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:12 |
| -        | 1    | ("5977566").PN.  | USPAT   | 2002/03/05 11:12 |
| -        | 5    | 5977566.URPN.  | USPAT   | 2002/03/05 11:22 |
| -        | 5    | ("4232440"   "4495514"   "5122844"   "5696389"  <br>"5767581").PN.   | USPAT   | 2002/03/05 11:13 |
| -        | 729  | (438/604,606,605).CCLS.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 15:33 |
| -        | 98   | (438/608,609).CCLS.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:27 |
| -        | 4    | ((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:28 |
| -        | 30   | ((438/604,606,605).CCLS.) and (ito indium adj tin adj<br>oxide\$1 conduct\$5 near3 oxide\$1)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:37 |
| -        | 569  | (gallium adj nitrid\$5 GaN "Ga N") and (ito indium adj tin adj<br>oxide\$1 conduct\$5 near3 oxide\$1)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:43 |
| -        | 649  | (gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2<br>conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3<br>oxide\$1)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:49 |
| -        | 4    | ((438/604,606,605).CCLS.) and (transpar\$4 near2<br>conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium<br>adj tin adj oxide\$1 conduct\$5 near3 oxide\$1))               | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 16:54 |
| -        | 398  | ((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2<br>conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3<br>oxide\$1)) and (diode\$1 LED\$1 light near emit\$4) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 17:07 |

|   |     |   |   |                  |
|---|-----|---|---|------------------|
| - | 390 | ((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) not (((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)) (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) (((438/604,606,605).CCLS.) and (transpar\$4 near2 conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1))))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 11:51 |
| - | 191 | ((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 11:08 |
| - | 0   | 20020000563.URPN.   | USPAT   | 2002/03/05 12:11 |
| - | 0   | 6316792.URPN.   | USPAT   | 2002/03/05 13:43 |
| - | 6   | ("Re35665"   "4232440"   "4495514"   "5122844"   "5696389"   "5767581").PN.   | USPAT   | 2002/03/05 13:43 |
| - | 1   | 6078064.URPN.   | USPAT   | 2002/03/05 15:46 |
| - | 6   | ("5369289"   "5684523"   "5789265"   "5798537"   "5880486"   "5923690").PN.   | USPAT   | 2002/03/05 15:46 |
| - | 54  | ((438/604,606,605).CCLS.) (gallium adj nitrid\$5 GaN "Ga N") and ((indium tin) adj oxide) and (438/\$ 257/\$) not (((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)) (((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)) (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) (((438/604,606,605).CCLS.) and (transpar\$4 near2 conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1))))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 17:07 |
| - | 232 | (257/615).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 17:07 |
| - | 226 | ((257/615).CCLS.) not (((438/604,606,605).CCLS.) (gallium adj nitrid\$5 GaN "Ga N")) and ((indium tin) adj oxide) and (438/\$ 257/\$) not (((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)) (((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)) (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) (((438/604,606,605).CCLS.) and (transpar\$4 near2 conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)))) (((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)) (((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)) (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) (((438/604,606,605).CCLS.) and (transpar\$4 near2 conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)))) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 17:07 |

|   |       |   |   |                  |
|---|-------|---|---|------------------|
| - | 88    | ((257/615).CCLS.) not (((438/604,606,605).CCLS.) (gallium adj nitrid\$5 GaN "Ga N") and ((indium tin) adj oxide) and (438/\$ 257/\$) not (((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)) (((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)) (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) (((438/604,606,605).CCLS.) and (transpar\$4 near2 conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)))) (((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)) (((438/604,606,605).CCLS.) and ((438/608,609).CCLS.)) (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) (((438/604,606,605).CCLS.) and (transpar\$4 near2 conduct\$5) not (((438/604,606,605).CCLS.) and (ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)))) and (diode\$1 LED\$1 light near emit\$4) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/05 17:08 |
| - | 19    | gallium adj nitride with boron adj phosphide  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:36 |
| - | 2     | gallium adj nitride same boron adj phosphide not (gallium adj nitride with boron adj phosphide)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:23 |
| - | 22493 | Showa adj Denko   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 09:37 |
| - | 39    | gallium adj nitride and (Showa adj Denko)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 09:38 |
| - | 15    | buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:34 |
| - | 225   | boron adj phosphide not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:29 |
| - | 42    | boron adj phosphide and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:34 |
| - | 3634  | buffer same BP not (gallium adj nitride with boron adj phosphide)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:34 |

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|---|------|---|---|------------------|
| - | 7093 | bp and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 11:06 |
| - | 765  | (buffer same BP not (gallium adj nitride with boron adj phosphide)) and (bp and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide)))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 10:36 |
| - | 4    | gallium adj nitride and ((buffer same BP not (gallium adj nitride with boron adj phosphide)) and (bp and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 11:02 |
| - | 19   | 5076860.URPN.   | USPAT   | 2002/03/06 10:59 |
| - | 5    | ("3925121"   "4213781"   "4365107"   "4697202"   "4879487").PN.   | USPAT   | 2002/03/06 10:59 |
| - | 621  | ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:19 |
| - | 193  | (ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 11:06 |
| - | 123  | ((ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))) and (438/\$ 257/\$)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 11:12 |
| - | 109  | ((((ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4) not ((buffer same boron adj phosphide not (gallium adj nitride with boron adj phosphide)) (gallium adj nitride with boron adj phosphide))) and (438/\$ 257/\$)) not (((gallium adj nitrid\$5 GaN "Ga N") and (transpar\$4 near2 conduct\$5 ito indium adj tin adj oxide\$1 conduct\$5 near3 oxide\$1)) and (diode\$1 LED\$1 light near emit\$4)) and (438/\$ 257/\$)) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 15:08 |
| - | 2    | 5789768.URPN.   | USPAT   | 2002/03/06 11:26 |
| - | 1    | "5717226".PN.   | USPAT   | 2002/03/06 11:26 |
| - | 2    | 5528071.URPN.   | USPAT   | 2002/03/06 11:28 |
| - | 3    | ("4633287"   "4796084"   "4885622").PN.   | USPAT   | 2002/03/06 11:28 |
| - | 2    | jp-01041520-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 15:32 |
| - | 2    | jp-01142051-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 15:32 |
| - | 2    | jp-2001142051-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/03/06 15:33 |

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|---|-----|---|---|------------------|
| - | 326 | UDAGAWA-TAKASHI   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 09:11 |
| - | 3   | high adj light adj emission and UDAGAWA-TAKASHI   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 09:23 |
| - | 3   | ("5977566").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 09:23 |
| - | 7   | 5977566.URPN.   | USPAT   | 2002/07/22 09:23 |
| - | 5   | ("4232440"   "4495514"   "5122844"   "5696389"  <br>"5767581").PN.  | USPAT   | 2002/07/22 09:23 |
| - | 4   | 4232440.URPN.   | USPAT   | 2002/07/22 09:28 |
| - | 3   | ("3808108"   "3909929"   "4156963").PN.   | USPAT   | 2002/07/22 09:28 |
| - | 19  | ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin) adj<br>oxide\$1 conduct\$5 near3 oxide\$1) with (many plural\$3<br>multipl\$4)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 10:47 |
| - | 0   | 20020063256.URPN.   | USPAT   | 2002/07/22 10:45 |
| - | 36  | ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin) adj<br>oxide\$1 conduct\$5 near3 oxide\$1) same (many plural\$3<br>multipl\$4) not (ohmic with (transpar\$4 near2 conduct\$5 ito<br>(indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1) with<br>(many plural\$3 multipl\$4))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 10:53 |
| - | 17  | ohmic with (many plural\$3 multipl\$4) same (transpar\$4<br>near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5<br>near3 oxide\$1) not ((ohmic with (transpar\$4 near2<br>conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3<br>oxide\$1) with (many plural\$3 multipl\$4)) (ohmic with<br>(transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1<br>conduct\$5 near3 oxide\$1) same (many plural\$3 multipl\$4)<br>not (ohmic with (transpar\$4 near2 conduct\$5 ito (indium<br>tin) adj oxide\$1 conduct\$5 near3 oxide\$1) with (many<br>plural\$3 multipl\$4))))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 11:12 |
| - | 59  | ohmic\$5 same (many plural\$3 multipl\$4) same (transpar\$4<br>near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5<br>near3 oxide\$1) not ((ohmic with (transpar\$4 near2<br>conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3<br>oxide\$1) with (many plural\$3 multipl\$4)) (ohmic with<br>(transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1<br>conduct\$5 near3 oxide\$1) same (many plural\$3 multipl\$4)<br>not (ohmic with (transpar\$4 near2 conduct\$5 ito (indium<br>tin) adj oxide\$1 conduct\$5 near3 oxide\$1) with (many<br>plural\$3 multipl\$4)))) (ohmic with (many plural\$3 multipl\$4)<br>same (transpar\$4 near2 conduct\$5 ito (indium tin) adj<br>oxide\$1 conduct\$5 near3 oxide\$1) not ((ohmic with<br>(transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1<br>conduct\$5 near3 oxide\$1) with (many plural\$3 multipl\$4))<br>(ohmic with (transpar\$4 near2 conduct\$5 ito (indium tin)<br>adj oxide\$1 conduct\$5 near3 oxide\$1) same (many plural\$3<br>multipl\$4) not (ohmic with (transpar\$4 near2 conduct\$5 ito<br>(indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1) with<br>(many plural\$3 multipl\$4)))))) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 11:03 |



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|---|-----|--|---|------------------|
| - | 410 | electrode\$1 with percent with area  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/22 14:23 |
| - | 21  | ohmic with electrode\$1 and (electrode\$1 with percent with area)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:09 |
| - | 3   | ("5977566").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 09:33 |
| - | 2   | TAKEUCHI-RYOICHI and NABEKURA-WATARU and HOSHINA-KOJI and UDAGAWA-TAKASHI  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 09:36 |
| - | 392 | TAKEUCHI-RYOICHI NABEKURA-WATARU HOSHINA-KOJI UDAGAWA-TAKASHI  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 09:37 |
| - | 30  | TAKEUCHI-RYOICHI NABEKURA-WATARU HOSHINA-KOJI UDAGAWA-TAKASHI  | USPAT;<br>US-PGPUB                                      | 2002/12/13 09:41 |
| - | 332 | UDAGAWA-TAKASHI  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 14:55 |
| - | 60  | (TAKEUCHI-RYOICHI NABEKURA-WATARU HOSHINA-KOJI UDAGAWA-TAKASHI) not UDAGAWA-TAKASHI  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:00 |
| - | 43  | ohmic with electrode\$1 and (electrode\$1 with percent\$4 with area)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:09 |
| - | 22  | ohmic with electrode\$1 and (electrode\$1 with percent with area)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:10 |
| - | 21  | (ohmic with electrode\$1 and (electrode\$1 with percent\$4 with area) ) not (ohmic with electrode\$1 and (electrode\$1 with percent with area) ) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:10 |
| - | 25  | (ohmic ohmically) with (many plural\$3 multipl\$4) and ((438/604,606,605).CCLS.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:14 |
| - | 921 | (ohmic ohmically) with (many plural\$3 multipl\$4) and (438/\$6 257/\$6)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 10:15 |

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|---|-----|--|---|------------------|
| - | 157 | ((ohmic ohmically) with (many plural\$3 multipl\$4) and (438/\$6 257/\$6)) and (transpar\$4 near2 conduct\$5 ito (indium tin) adj oxide\$1 conduct\$5 near3 oxide\$1)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 14:00 |
| - | 0   | 6420732.URPN.  | USPAT   | 2002/12/13 10:33 |
| - | 20  | ("4152044"   "5048035"   "5076860"   "5153889"   "5192985"   "5226053"   "5345092"   "5488233"   "5502316"   "5724376"   "5789768"   "5811839"   "5821569"   "5837561"   "5861636"   "5917201"   "5972731"   "6063643"   "6222868"   "6225648").PN.  | USPAT   | 2002/12/13 10:40 |
| - | 4   | 6225648.URPN.  | USPAT   | 2002/12/13 10:39 |
| - | 2   | ("5861636"   "6040590").PN.  | USPAT   | 2002/12/13 10:39 |
| - | 13  | 5789768.URPN.  | USPAT   | 2002/12/13 10:39 |
| - | 1   | "5717226".PN.  | USPAT   | 2002/12/13 10:39 |
| - | 15  | ("5717226".PN. 5789768.URPN. (("5861636"   "6040590").PN.) 6225648.URPN.) not (((("4152044"   "5048035"   "5076860"   "5153889"   "5192985"   "5226053"   "5345092"   "5488233"   "5502316"   "5724376"   "5789768"   "5811839"   "5821569"   "5837561"   "5861636"   "5917201"   "5972731"   "6063643"   "6222868"   "6225648").PN.))   | USPAT   | 2002/12/13 10:51 |
| - | 0   | 6469324.URPN.  | USPAT   | 2002/12/13 10:45 |
| - | 20  | ("4419533"   "4626739"   "5008718"   "5048035"   "5233204"   "5301201"   "5502316"   "5517039"   "5574304"   "5682043"   "5707745"   "5779924"   "5789768"   "5792698"   "5793062"   "6107648"   "6121635"   "6277665"   "6287882"   "6319778").PN.  | USPAT   | 2002/12/13 10:45 |
| - | 0   | 6420732.URPN.  | USPAT   | 2002/12/13 10:45 |
| - | 20  | ("4152044"   "5048035"   "5076860"   "5153889"   "5192985"   "5226053"   "5345092"   "5488233"   "5502316"   "5724376"   "5789768"   "5811839"   "5821569"   "5837561"   "5861636"   "5917201"   "5972731"   "6063643"   "6222868"   "6225648").PN.  | USPAT   | 2002/12/13 10:45 |
| - | 17  | ((("4419533"   "4626739"   "5008718"   "5048035"   "5233204"   "5301201"   "5502316"   "5517039"   "5574304"   "5682043"   "5707745"   "5779924"   "5789768"   "5792698"   "5793062"   "6107648"   "6121635"   "6277665"   "6287882"   "6319778").PN.) ((("4152044"   "5048035"   "5076860"   "5153889"   "5192985"   "5226053"   "5345092"   "5488233"   "5502316"   "5724376"   "5789768"   "5811839"   "5821569"   "5837561"   "5861636"   "5917201"   "5972731"   "6063643"   "6222868"   "6225648").PN.)) not ("5717226".PN. 5789768.URPN. (("5861636"   "6040590").PN.) 6225648.URPN. (((("4152044"   "5048035"   "5076860"   "5153889"   "5192985"   "5226053"   "5345092"   "5488233"   "5502316"   "5724376"   "5789768"   "5811839"   "5821569"   "5837561"   "5861636"   "5917201"   "5972731"   "6063643"   "6222868"   "6225648").PN.)) | USPAT   | 2002/12/13 10:53 |



|   |    |   |   |                  |
|---|----|---|---|------------------|
| - | 52 | ((("4419533"   "4626739"   "5008718"   "5048035"  <br>"5233204"   "5301201"   "5502316"   "5517039"  <br>"5574304"   "5682043"   "5707745"   "5779924"  <br>"5789768"   "5792698"   "5793062"   "6107648"  <br>"6121635"   "6277665"   "6287882"   "6319778").PN.)<br>((("4152044"   "5048035"   "5076860"   "5153889"  <br>"5192985"   "5226053"   "5345092"   "5488233"  <br>"5502316"   "5724376"   "5789768"   "5811839"  <br>"5821569"   "5837561"   "5861636"   "5917201"  <br>"5972731"   "6063643"   "6222868"   "6225648").PN.)<br>"5717226".PN. 5789768.URPN. ((("5861636"  <br>"6040590").PN.) 6225648.URPN. ((("4152044"   "5048035"  <br>"5076860"   "5153889"   "5192985"   "5226053"  <br>"5345092"   "5488233"   "5502316"   "5724376"  <br>"5789768"   "5811839"   "5821569"   "5837561"  <br>"5861636"   "5917201"   "5972731"   "6063643"  <br>"6222868"   "6225648").PN.) | USPAT   | 2002/12/13 14:14 |
| - | 2  | ("5076860").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 14:00 |
| - | 0  | amorphous adj body with as adj grwon  | USPAT   | 2002/12/13 14:14 |
| - | 0  | amorphous adj body with as adj grown  | USPAT   | 2002/12/13 14:15 |
| - | 0  | amorphous adj body with "as" adj grown  | USPAT   | 2002/12/13 14:15 |
| - | 0  | amorphous adj body with grown   | USPAT   | 2002/12/13 14:15 |
| - | 2  | amorphous adj body with grown   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 14:16 |
| - | 31 | amorphous with body with grown  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 14:16 |
| - | 1  | amorphous with body with grown with buffer  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 14:21 |
| - | 0  | JP-200058451-\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/11 09:13 |
| - | 1  | JP-05008451-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/13 14:23 |
| - | 5  | ("6512248").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 13:43 |
| - | 2  | jp-11296374-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 14:16 |

|   |      |   |   |                  |
|---|------|---|---|------------------|
| - | 2    | ("5789768").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 13:57 |
| - | 18   | 5789768.URPN.   | USPAT   | 2003/06/10 14:07 |
| - | 1    | "5717226".PN.   | USPAT   | 2003/06/10 14:07 |
| - | 0    | 6552367.URPN.   | USPAT   | 2003/06/10 14:14 |
| - | 4    | ("3889286"   "5789768"   "5814839"   "6057562").PN.   | USPAT   | 2003/06/10 14:14 |
| - | 0    | tw-88117542-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 14:20 |
| - | 7    | HSIEH-MIN-HSUN  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 14:53 |
| - | 2    | jp-11349627-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 14:54 |
| - | 35   | UDAGAWA-TAKASHI   | USPAT;<br>US-PGPUB                                      | 2003/06/10 15:32 |
| - | 0    | 6512248.URPN.   | USPAT   | 2003/06/11 09:40 |
| - | 2    | ("6078064"   "6225648").PN.   | USPAT   | 2003/06/10 15:19 |
| - | 1109 | distributed with contact with layer   | USPAT;<br>US-PGPUB                                      | 2003/06/10 15:36 |
| - | 781  | (438/604,606,605).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 15:33 |
| - | 1    | (distributed with contact with layer ) and<br>((438/604,606,605).CCLS.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 15:33 |
| - | 781  | (438/\$6 257/\$6) and ((438/604,606,605).CCLS.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 15:34 |
| - | 246  | (438/\$6 257/\$6) and (distributed with contact with layer )  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/10 15:35 |
| - | 9    | distributed NEAR2 contact near2 layer and ((438/\$6<br>257/\$6) and (distributed with contact with layer )<br>) | USPAT;<br>US-PGPUB                                      | 2003/06/10 15:36 |
| - | 9    | distributed NEAR2 contact near2 layer and ((438/\$6 257/\$6)<br>and (distributed with contact with layer )<br>) | USPAT;<br>US-PGPUB                                      | 2003/06/10 15:40 |
| - | 43   | distributed NEAR2 contact and ((438/\$6 257/\$6) and<br>(distributed with contact with layer )<br>)             | USPAT;<br>US-PGPUB                                      | 2003/06/10 15:40 |

|   |    |  |   |                  |
|---|----|--|---|------------------|
| - | 34 | (distributed NEAR2 contact and ((438/\$6 257/\$6) and (distributed with contact with layer )<br>) not (distributed NEAR2 contact near2 layer and ((438/\$6 257/\$6) and (distributed with contact with layer )<br>)  | USPAT;<br>US-PGPUB                                      | 2003/06/10 15:41 |
| - | 5  | 4232440.URPN.  | USPAT   | 2003/06/10 15:44 |
| - | 3  | ("3808108"   "3909929"   "4156963").PN.  | USPAT   | 2003/06/10 15:44 |
| - | 6  | ("4232440"   "5358880"   "5608287"   "5822351"  <br>"5917202"   "6278236").PN.   | USPAT   | 2003/06/10 15:45 |
| - | 0  | 6465808.URPN.  | USPAT   | 2003/06/10 15:45 |
| - | 0  | JP-20058451-\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/11 09:13 |
| - | 0  | JP-200058451-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/11 09:15 |
| - | 2  | JP-2000058451-\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/11 09:15 |
| - | 5  | ("6512248").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/06/11 09:40 |
| - | 2  | ("20020000563").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 14:20 |
| - | 27 | ohmic\$5 with (many plural\$3 multipl\$4) and<br>((438/604,606,605).CCLS.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 15:01 |
| - | 25 | (US-6110813-\$ or US-5956604-\$ or US-5804487-\$ or<br>US-5665614-\$ or US-5646069-\$ or US-5518934-\$ or<br>US-5284798-\$ or US-5116774-\$ or US-5091338-\$ or<br>US-5045502-\$ or US-5013685-\$ or US-4989065-\$ or<br>US-4833042-\$ or US-4771017-\$ or US-4662063-\$ or<br>US-4564720-\$ or US-4471005-\$ or US-4414561-\$ or<br>US-4366186-\$ or US-4186410-\$ or US-4081824-\$ or<br>US-3984261-\$ or US-3929525-\$ or US-3636618-\$).did. or<br>(EP-252300-\$).did.   | USPAT;<br>US-PGPUB;<br>EPO                              | 2003/11/11 15:00 |
| - | 2  | (ohmic\$5 with (many plural\$3 multipl\$4) and<br>((438/604,606,605).CCLS.) ) not ((US-6110813-\$ or<br>US-5956604-\$ or US-5804487-\$ or US-5665614-\$ or<br>US-5646069-\$ or US-5518934-\$ or US-5284798-\$ or<br>US-5116774-\$ or US-5091338-\$ or US-5045502-\$ or<br>US-5013685-\$ or US-4989065-\$ or US-4833042-\$ or<br>US-4771017-\$ or US-4662063-\$ or US-4564720-\$ or<br>US-4471005-\$ or US-4414561-\$ or US-4366186-\$ or<br>US-4186410-\$ or US-4081824-\$ or US-3984261-\$ or<br>US-3929525-\$ or US-3636618-\$).did. or (EP-252300-\$).did.) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 15:01 |

|   |    |   |   |                  |
|---|----|---|---|------------------|
| - | 28 | ohmic\$5 with (many plural\$3 multipl\$4) with project\$4   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 15:03 |
| - | 12 | ohmic\$5 with (many plural\$3 multipl\$4) same project\$4 not<br>(ohmic\$5 with (many plural\$3 multipl\$4) with project\$4 ) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 15:22 |
| - | 5  | ("6512248").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 15:37 |
| - | 2  | jp-11296374-\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 15:37 |
| - | 29 | "5789768"   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/11 16:06 |
| - | 2  | ("5789768").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/12 16:14 |
| - | 3  | ("5977566").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/12 16:14 |